

CLAIMS

## WHAT IS CLAIMED IS:

1. A computer-aided process of calculating the number of carpet tiles required for an installation project comprising the steps of:
  - providing the dimensions of a carpet tile;
  - inputting the dimensions of a room floor length and a room floor width; and
  - calculating the total number of carpet tiles needed.
2. The process of claim 1, wherein the carpet tiles are non-rectangular.
3. The process of claim 1, further comprising the step of calculating the dimensions of a border region to be covered by fractional tile segments, wherein said fractional tile segments are included in the calculation of the total number of carpet tiles needed.
4. The process of claim 1, further comprising determining the number of boxes of carpet tiles needed to provide at least the total number of carpet tiles.
5. The process of claim 1, further comprising calculating at least one starting tile placement location for said room dimensions.

6. The process of claim 5, further comprising displaying a location of said at least one starting tile placement location within a scale drawing of said room.

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7. The process of claim 6, further comprising displaying the position for the remaining carpet tiles within said scale drawing of said room.

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8. The process according to claim 1 wherein said carpet tile dimensions further define carpet tiles having at least one protrusion on one edge of the tile and at least one corresponding indentation on an opposing edge of the carpet tile.

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9. The process according to claim 1 wherein said carpet tile dimensions further define rectangular carpet tiles.

10. The process according to claim 1 wherein said carpet tiles are cushion-backed carpet tiles.

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11. The process according to claim 1 wherein said step of determining the total number of carpet tiles needed additionally includes adding a sufficient number of additional tiles so as to

include a calculated number of replacement tiles within said total number of carpet tiles.

12. A process of providing customized instructions for  
5 installation of a carpet tile product comprising the steps of:  
providing dimensions of a selected carpet tile product;  
providing dimensions of a length and a width of an  
installation area;  
calculating an anchor point location for placement of an  
10 initial tile;  
such that when said initial tile is placed at said anchor  
point, placement of additional carpet tiles is carried out such that a  
predefined minimum tile width is maintained throughout the  
installation.

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13. The process according to claim 12, wherein said step of  
calculating an anchor point location additionally includes providing a  
visual display of said anchor point within a scaled diagram of said  
installation area.

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14. The process according to claim 13, wherein said visual  
display of said anchor point additionally includes a display of  
locations for a plurality of core carpet tiles.

15. The process according to claim 14 wherein said visual display of said anchor point additionally includes a display of locations for a plurality of border carpet tiles.

5 16. The process according to claim 12, wherein said step of calculating an anchor point location includes providing distance coordinates relative to a length edge and width edge of said installation area.

10 17. The process according to claim 12, wherein said carpet tile product defines a plurality of carpet tiles, each said tile having at least one protrusion on one edge of the carpet tile and at least one corresponding indentation on an opposing edge of the carpet tile.

15 18. The process according to claim 12, wherein said carpet tile products further define a plurality of rectangular carpet tiles.

19. The process according to claim 12, wherein said carpet tile products further define carpet tiles having a cushioned backing.

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20. The process according to claim 12, further including use of an identifier to indicate border carpet tiles which are to be split and used on opposite sides of said installation area.

21. The process according to claim 12, wherein the process includes the additional step of determining the total number of carpet tiles needed to cover said installation area.

- 5 22. A computer-aided method of calculating the number of carpet tiles required for an installation project comprising the steps of:
- providing the dimensions of a non-rectangular carpet tile;
  - inputting the dimensions of a room floor length and a
  - 10 room floor width;
  - calculating the number of core carpet tiles needed;
  - calculating the dimensions of a border region;
  - calculating the number of carpet tiles needed to cover the border region;
  - 15 determining the total number of carpet tiles needed;
  - calculating at least one starting tile placement location for said room dimensions;
  - displaying a location of said at least one starting tile placement location within a scale drawing of said room;
  - 20 displaying the position for the remaining core carpet tiles within said scale drawing of said room; and,
  - displaying the position of the tiles for said border region.

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23. An internet-based system for use in calculating the number of carpet tiles required for an installation project, the system comprising:

a registry holding dimensions of at least one carpet tile

construction;

5 an input screen for entry of the dimensions of a room floor length and a room floor width by a remote user; and

a programmed processor adapted to calculate the total number of carpet tiles needed.